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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,809	01/24/2002	Giovanni Aiello	33900-98	3391
7590 11/29/2004			EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE Suite 1210 551 Fifth Avenue New York, NY 10176			EDWARDS JR, TIMOTHY	
			ART UNIT	PAPER NUMBER
			2635	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/056,809

Applicant(s)

AIELLO, GIOVANNI

Examiner

Timothy Edwards, Jr.

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 2,4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3,6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeter '678.

Considering claim 1, Jeter discloses using the conductivity of fluid flowing in a pipeline as an electrical conductor system comprising, a) a plurality of hollow rods made of a conductive material, the inside faces of the rods being covered in insulating material (see col 2, line 65 to col 3, line 10 and figs 1A-C); b) drilling tool secured to the bottom of the rod (see fig 1C); c) borehole filled with an electrically conductive mud, the conductive mud inside and outside the drill string together with the drill string forms an electrically conductive loop (see col 3, lines 20-25); d) a first electrical unit disposed close to the bottom end of the drill string having an electrode secured to the insulating inside face of the drill string, the electrode being electrically in contact with the mud contained inside the drill string to create an electrical current in the loop that is representative of information to be transmitted (see col 4, lines 7-27); e) a second electrically unit disposed close to the top end of the drill string, in order to receive the information contained in the electrical current (see col 3, line 51 to col 4, line 6); f)

means for applying a voltage to the electrode, which represents the information to be transmitted (see col 4, lines 7-17).

Considering claim 3, Jeter discloses the limitation of this claim see col 6, lines 37-54.

Considering claim 6, Jeter discloses the limitation of this claim see figs 1A and 1B, items 18, 24, 32.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeter '678.

Considering claim 7, Jeter does not specifically recite the electrode has an inside face that withstands abrasion. However, Jeter disclose the use of electrodes in contact with drilling mud. One of ordinary skill in the art readily recognize drilling mud is abrasive because of the environment in which it is produced. Therefore, it would have been obvious to one of ordinary skill in the art the electrodes of the Jeter system would be

able to withstand abrasion because Jeter expresses the desire to use electrodes in contact with drilling mud.

### ***Allowable Subject Matter***

Claims 2,4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. claim 2 is objected to, claims 4 and 5 depend from claim 2.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fontenot et al '609, More et la '393, Denison et al '865, Meadows '203, and Grosso et al '681 disclose means of using an insulator in a drill string to communicate data.

1. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (571) 272-3068.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
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or fax to:

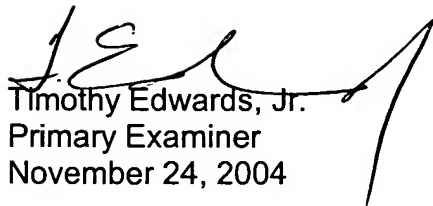
(703), 872-9314 (for formal communications intended for entry)

Or:

(for informal or draft communications, please label "PROPOSED"  
or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor, (Receptionist).

  
Timothy Edwards, Jr.  
Primary Examiner  
November 24, 2004